

Patent Application No. 09/648,767
Office Action dated June 28, 2005
Response dated September 28, 2005

REMARKS

The Applicant gratefully acknowledges the allowance of claims 44-48.

A. Summary of the Amendments

The present application now contains 59 claims.

Claim 1 has been amended to clarify that each wrapper symbol comprises a multi-bit pattern. Claim 10 has been amended to clarify that each wrapper segment comprises a multi-bit symbol. Claim 22 has been amended to clarify that each wrapper symbol comprises a multi-bit sequence. Claims 39, 49 and 54 have been amended to clarify that each wrapper symbol is a multi-bit symbol. It is submitted that these amendments are not necessary for patentability, as the following arguments refute the rejections to the claims. However, these amendments clarify the claims, and make the claims more understandable. Claim 7 is also amended for clarification purposes, to make the claim more readable, without any surrender of scope.

Claims 55-59 are supported by the original disclosure, for example on page 21.

It is respectfully submitted that no new matter has been added to the application under the present response.

B. Summary of Rejections and Reply

1 Rejection of claims 1-20, 39-43, 49, 50- 54 under 35 USC 103

In Section 3 of the Office Action, the Examiner has rejected claim 1-20, 39-43, 49 and 50-54 under 35 USC 103(a) as being unpatentable over Petsko et al. U.S. Patent

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No. 6,292,516 (hereinafter referred to as "Petsko") in view of Tsuda U.S. Patent No. 5,619,507 (hereinafter referred to as "Tsuda") and Ballintine et al. U.S. Patent No. 6,724,996 (hereinafter referred to as "Ballintine"). As set forth herein below, Applicant respectfully traverses this rejection and submits that claims 1-20, 39-43, 49, 50 - 54 were, and certainly are now, in allowable form.

With respect, the Official Action simply fails to establish a prima facie case of obviousness.

For the Examiner to establish a prima facie case of obviousness, three criteria must be considered: (1) there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine the reference teachings, (2) there must be a reasonable expectation of success, and (3) the prior art references must teach or suggest all of the claim limitations. MPEP §§ 706.02(j), 2142 (8th ed.).

For the Patent Office to combine references in an obviousness analysis, the Patent Office must do two things. First, the Patent Office must articulate a motivation to combine the references, and second, the Patent Office must support the articulated motivation with actual evidence. *In re Dembiczak*, 175 F.3d 994,999 (Fed. Cir. 1999). While the range of sources for the motivation is broad, the range of available sources does not diminish the requirement for actual evidence. *Id*

With respect there is simply no suggestion or motivation to combine the references in the manner of the rejection. Petsko relates to wireless data transmission where diversity antennas are used. It describes a signal in which test words are inserted between adjacent data fragments. The test words are used to provide an indication of the reception quality of each antenna capable of receiving the signal. As stated in column 5, lines 26-30, "Each test word is divided into n different ANT fields.

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Each ANT field includes a predefined test pattern of bits (or symbols) which is received by the receiving device using a different respective diversity antenna."

Tsuda relates to frame synchronization for satellite transmissions. These references are in different arts, and solve different problems. There is simply no motivation or suggestion in either Petsko or Tsuda to combine the diversity selection teachings of Petsko with the frame synchronization teachings of Tsuda.

Ballantine simply describes known wrapper techniques similar to that described in the background of the present invention, and does not add anything to the analysis. It certainly does not teach or suggest the claimed limitations, or provides any suggestion or motivation to combine its teachings with those of Petsko and Tsuda.

The official action fails to establish a prima facie case of obviousness as the official action fails to show where or how any of the references provide a motivation or suggestion to combine. Certainly no evidence of such a motivation is provided.

This is not surprising, as there would be no such motivation. The passage of Tsuda teaches the use of a phase modulation schemes e.g., QPSK or BPSK, which are not typically used in optical systems. Optical systems which use wrappers, such as the system described in Ballantine, use "on-off" modulation schemes.

More importantly, Petsko actually teaches away from the solution of the present invention.

Quoting from Petsko column 2, lines 25-31:

"In view of the aforementioned shortcomings associated with conventional data transmission, there is a strong need in the art for an improved method and apparatus which allows for reduced overhead associated with transmitting data. In particular, there

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is a strong need in the art for an apparatus and method which does not sacrifice data throughput." (emphasis added).

This is contrasted by the present invention, that not only does not reduce overhead, but actively expands the number of bits in the wrapper signal, in order to allow intermediate receiver to detect the overhead bits in the expanded wrapper using a low bit-rate receiver.

Thus a person skilled in the art would not be motivated to combine the references. Certainly no evidence of such has been demonstrated. Accordingly the rejection has failed to demonstrate a prima facie case of obviousness.

Accordingly withdrawal of the rejection is requested, as the applicant respectfully submits that claims 1-20, 39-43, 49, 50 - 54 were in allowable form, prior to the amendments made herein. Consequently, the amendments made herein are not necessary for patentability. However they do clarify the invention. In any event, the preceding arguments are even more applicable to the present claims, and no combination of these references teach or suggest the invention as now claimed.

Without limiting the generality of the foregoing, we make the following observations with respect to the following specific claims, however it is noted that the following comments should not be deemed necessary for establishing patentability of the claims, as the above arguments should already have established why the rejections should be withdrawn.

Independent claim 1

The Examiner's attention is directed to the following emphasized limitations of claim 1:

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"A communications signal [...], comprising:

recurrent wrapper bursts, each wrapper burst comprising one or more wrapper symbols, **each wrapper symbol comprising a multi-bit pattern which corresponds to an information bit**

wherein each wrapper symbol is characterized by a signal level transition pattern, **said signal level transition pattern being either a first pattern or a second pattern depending on the logic value of the respective information bit;**

[...]."

Applicant respectfully submits that neither Petsko nor Tsuda, nor Ballantine, or any combination the three discloses, teaches or suggests the above-emphasized limitations of claim 1. Specifically, the cited references do not teach or suggest that each wrapper symbol "corresponds to an information bit" and that the signal level transition pattern characterizing each wrapper symbol is "either a first pattern or a second pattern depending on the logic value of the respective information bit." In any event, they certainly do not teach or suggest this for a multi bit wrapper symbol which corresponds to an information bit.

Petsko describes a signal in which test words are inserted between adjacent data fragments. The test words are used to provide an indication of the reception quality of each antenna capable of receiving the signal. As stated in column 5, lines 26-30, "Each test word is divided into n different ANT fields. Each ANT field includes a predefined test pattern of bits (or symbols) which is received by the receiving device using a different respective diversity antenna."

Furthermore, the test patterns in Petsko are not characterized by a "signal level transition pattern being either a first pattern or a second pattern depending on the logic value of the respective information bit". Rather, notwithstanding that there is no corresponding information bit in Petsko and therefore no "logic value of the respective information bit", Petsko uses the same test pattern in each of the ANT fields of a particular test word (see column 8, lines 6-7). Thus, there is a single, identical test

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pattern being used and no possibility of a "signal level transition pattern being either a first pattern or a second pattern".

In view of the above, it should be appreciated that Petsko cannot be said to disclose, teach or suggest at least two of the above-emphasized limitations of claim 1.

Moreover, Applicant respectfully submits that these missing limitations are also not taught or suggested by Tsuda. Tsuda describes a frame synchronizing circuit for detecting a unique word only when a signal is being received and has been detected. A unique word is included in each frame of 240 symbols for the purposes of frame synchronization. As shown in Figure 2, four frames constitute a transmission unit, such that four unique words UW1-UW4 are periodically provided within a set of 960 symbols. Nowhere in Tsuda is it taught or suggested that each of these unique words "corresponds to an information bit". In addition, Tsuda makes absolutely no mention of each of the unique words UW1-UW4 being characterized by a signal level pattern having "either a first pattern or a second pattern depending on the logic value of the respective information bit".

For the above reasons, it is respectfully submitted that at least two limitations of claim 1 are neither taught nor suggested by the cited art, whether taken severally or in combination. Therefore, Applicant respectfully submits that there is at least one criterion, required for establishing a *prima facie* case of obviousness in accordance with MPEP 706.02(j), which is in this case not satisfied. The Examiner is thus respectfully requested to withdraw his rejection of claim 1.

Dependent claims 2-9

Claims 2-9 depend either directly or indirectly on claim 1 and therefore include all of the limitations of claim 1. Hence, for the same reasons as those set forth herein above in respect of claim 1, Applicant respectfully submits that claims 2-9 are in

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allowable form and, thus, the Examiner is respectfully requested to withdraw his rejection of claims 2-9.

On page 4 of the Office Action, the Examiner has rejected claims 49-52 and 54 under 35 USC 103(a) as being unpatentable over Petsko et al. U.S. Patent No. 6,292,516 (hereinafter referred to as "Petsko") in view of Tsuda U.S. Patent No. 5,619,507 (hereinafter referred to as "Tsuda").

As set forth herein below, the Applicant respectfully traverses the rejection and submits that claims 49-52 and 54 are in condition for allowance.

Independent claim 49

The Examiner's attention is directed to the following excerpt of claim 49, portions of which have been highlighted:

49. A system [...] comprising:

[...]

means for transforming the overhead bit stream into a series of bursts which fit into respective ones of the gaps of the gapped bit stream;

wherein the second transforming step includes **mapping each overhead bit into a multi-bit wrapper symbol** which is represented by either a first signal level transition pattern or a second signal level transition pattern **depending on the logical value of the overhead bit**; and

wherein the first and second signal level transition patterns each have a distinct average signal level and are each characterized by at least one signal level transition.

It is respectfully submitted that Petsko, Tsuda, and Ballantine, whether taken separately or in combination, do not teach or suggest the above features of claim 49.

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To begin with, it is respectfully submitted that the Office Action, has not addressed *any* of the features of the system claimed in claim 49.

In particular, the Examiner has not indicated why and how he believes that Petsko, Tsuda, Ballantine, or their combination, teaches or suggests the claimed feature of "means for transforming the overhead bit stream into a series of bursts which fit into respective ones of the gaps of the gapped bit stream[, the transforming including] mapping each overhead bit into a wrapper symbol", where each wrapper symbol "is represented by a first signal level transition pattern or a second signal level transition pattern depending on the logical value of the overhead bit".

Moreover, the fact that the Examiner has not addressed any of the features of the system claimed in claim 49 is not surprising since these features are totally absent from Petsko, Tsuda, Ballantine or their combination. Specifically, there is absolutely no mention or suggestion in Petsko, Tsuda, or their combination of "means for transforming the overhead bit stream into a series of bursts which fit into respective ones of the gaps of the gapped bit stream[, where the transforming includes] mapping each overhead bit into a multi-bit wrapper symbol [based] on the logical value of the overhead bit". These features are simply not taught or suggested by the references, even without the multi-bit amendment, and most certainly not with it.

It is thus respectfully submitted that at least one feature of claim 49 is neither taught nor suggested by the cited art. Therefore, the Applicant respectfully submits that at least one criterion required for establishing a *prima facie* case of obviousness in accordance with MPEP 706.02(j) is not satisfied. The Examiner is thus respectfully requested to withdraw his rejection of claim 49 and it is respectfully submitted that claim 49 is in condition for allowance.

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Dependent claims 50-53

Claims 50-53 depend either directly or indirectly on claim 49 and therefore include all of the features of claim 49. Hence, for the same reasons as those set forth herein above in respect of claim 49, the Applicant respectfully submits that claims 50-52 are in allowable condition and, thus, the Examiner is respectfully requested to withdraw his rejection of claims 50-52.

Independent claim 54

The Examiner's attention is directed to the following excerpt of claim 54, portions of which have been highlighted:

54. A wrapper symbol coder for mapping each of a plurality of overhead bits into a *multi-bit wrapper symbol*, the coder being operable to produce either a first signal level transition pattern or a second signal level transition pattern **depending on the logical value of each overhead bit**, wherein the first and second signal level transition patterns are each characterized by having a distinct average signal level and are each further characterized by at least one signal level transition.

It is respectfully submitted that Petsko and Tsuda and Ballantine, whether taken separately or in combination, do not teach or suggest the above features of claim 54, even without the multi-bit amendment, and most certainly with it.

To begin with, it is respectfully submitted that the Examiner, in his rejection of claim 54 on page 4 of the Office Action, has not addressed *any* of the features of the wrapper symbol coder claimed in claim 54.

In particular, the Examiner has not indicated why and how he believes that Petsko, Tsuda, or their combination, teaches or suggests the claimed coder for "mapping each of a plurality of overhead bits into a wrapper symbol", wherein the coder

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is "operable to produce either a first signal level transition pattern or a second signal level transition pattern depending on the logical value of each overhead bit".

If for any reason the Examiner continues to maintain an argument of unpatentability, then he is kindly and respectfully urged to identify which features of Petsko, Tsuda, or their combination, he considers as corresponding to the claimed coder for "mapping each of a plurality of overhead bits into a wrapper symbol" based on "the logical value of each overhead bit". The Examiner is also respectfully requested to note that an argument which fails to identify the claimed coder for "mapping each of a plurality of overhead bits into a wrapper symbol" based on "the logical value of each overhead bit", cannot support a finding of obviousness, as the third criterion required for establishing a *prima facie* case of obviousness in accordance with MPEP 706.02(j) will not be satisfied.

Moreover, the fact that the Examiner has not addressed any of the features of the wrapper symbol claimed in claim 54 is not surprising since these features are totally absent from Petsko, Tsuda, Ballantine or their combination. Specifically, there is absolutely no mention or suggestion in Petsko, Tsuda, Ballantine, or their combination of a coder for "mapping each of a plurality of overhead bits into a wrapper symbol" based on "the logical value of each overhead bit".

It is thus respectfully submitted that at least one feature of claim 54 is neither taught nor suggested by the cited art. Therefore, the Applicant respectfully submits that at least one criterion required for establishing a *prima facie* case of obviousness in accordance with MPEP 706.02(j) is not satisfied. The Examiner is thus respectfully requested to withdraw his rejection of claim 54 and it is respectfully submitted that claim 54 is in condition for allowance.

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3) Rejection of claims 21-26, 29 and 30-38 under 35 USC 103

In section 4 of the Office Action, the Examiner has rejected claims 21-26, 29 and 30-38 under 35 USC 103(a) as being unpatentable over Petsko in view of Tsuda , Ballantine, and Nakamura.

The above arguments are equally applicable, except the are buttressed by the fact that not only is there no motivation or suggestion to combine Petsko, Tsuda and Ballantine, but there is even less of a motivation or suggestion to combine all 4 of the cited references.

Without limiting the generality of the foregoing, we make the following observations with respect to the following specific claims, however it is noted that the following comments should not be deemed necessary for establishing patentability of the claims, as the above arguments should already have established why the rejections should be withdrawn.

Independent claim 22

The Examiner's attention is directed to the following emphasized limitations of claim 22:

"A method [...], the method comprising the steps of:

converting the composite optical signal into an electrical signal having an electrical bandwidth that is substantially less than the bandwidth of the high-speed data stream;

locating the position of each wrapper segment in the low-bandwidth electrical signal; and

detecting individual bits of the overhead bit stream from the average level of the low-bandwidth electrical signal during the located wrapper segments."

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As conceded by the Examiner, Petsko does not disclose, teach or suggest the above-emphasized limitations of claim 22. In addition, Applicant respectfully submits that Tsuda fails to teach or suggest the above-emphasized limitations of claim 22. In fact, it is unclear why Tsuda was even cited in the rejection since the Examiner's statement regarding Tsuda disclosing that signals have a dc balance component based on symbol transition does not in any way relate to the limitations of claim 22.

As stated above, Ballantine merely demonstrates the broad concept of a wrapper, which was discussed in the background section of the present application, and does not add anything to the analysis. In any event, Ballantine simply fails to teach or suggest any of the limitations of claim 22.

Moreover, it is respectfully submitted that Nakamura also fails to teach or suggest the above-emphasized limitations of claim 22. Specifically, Nakamura relates to an interface apparatus for interconnecting apparatus of two different systems, namely, an apparatus of the SDH system and an apparatus of the SONET system. The interface apparatus of Nakamura includes a "light/electricity converting unit 141 [that] converts [an] STM-n signal (or STS-m signal) inputted through a transmission line (mainly an optical fiber) into an electrical signal" (col. 20, line 66 to col. 21, line 2). However, Nakamura does not further characterize the conversion performed by the "light/electricity converting unit". In particular, Nakamura totally lacks any teaching or suggestion that the "light/electricity converting unit" converts the optical signal into "an electrical signal having an electrical bandwidth that is substantially less than the bandwidth of the high-speed data stream". In fact, the Examiner only refers to Figure 8 and reference block #153 in Nakamura, which have absolutely nothing to do with an electrical signal having an electrical bandwidth that is substantially less than the bandwidth of the high-speed data stream. Hence, it is Applicant's respectful submission that the above-emphasized limitation, absent from Petsko, Tsuda, and Ballantine is also completely lacking in Nakamura.

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Furthermore, since Nakamura does not teach or suggest conversion of an optical signal into a low-bandwidth electrical signal, it follows that Nakamura cannot possibly teach or suggest "locating the position of each wrapper segment in the low-bandwidth electrical signal" and "detecting individual bits of the overhead bit stream from the average level of the low-bandwidth electrical signal during the located wrapper segments". Again, the Examiner only refers to Figure 8 and reference block #153 in Nakamura which have absolutely nothing to do with these limitations. (Moreover, the Examiner has not referred to any of the cited references in an attempt to show that these two limitations have been taught or suggested.)

For the above reasons, it is respectfully submitted that at least three limitations of claim 22 are neither taught nor suggested by the cited art, whether taken severally or in combination. As such, Applicant respectfully submits that at least one criterion required for establishing a *prima facie* case of obviousness in accordance with MPEP 706.02(j) is not satisfied. Accordingly, it is respectfully submitted that claim 22 is in allowable form and, thus, the Examiner is respectfully requested to withdraw his rejection of claim 22.

Dependent claims 23-26 and 29-31

Claims 23-26 and 29-31 depend either directly or indirectly on claim 22 and therefore include all of the limitations of claim 22. Hence, for the same reasons as those set forth herein above in respect of claim 22, Applicant respectfully submits that claims 23-26 and 29-31 are in allowable form and, thus, the Examiner is respectfully requested to withdraw his rejection of claims 23-26 and 29-31.

Independent claim 32

The Examiner's attention is directed to the following excerpt of claim 32, portions of which have been highlighted:

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32. A system [...] comprising:
a receiver for converting the composite optical signal into an electrical signal having an electrical bandwidth that is substantially less than the bandwidth of the high-speed data stream;
a wrapper segment identifier connected to the receiver, for locating the position of each wrapper segment in the low-bandwidth electrical signal; and
a detector connected to the wrapper segment identifier, for detecting individual bits of the overhead bit stream from the average level of the low-bandwidth electrical signal during the located wrapper segments.

It is respectfully submitted that Petsko, Tsuda, and Nakamura, whether taken separately or in combination, do not teach or suggest the above features of claim 32.

Firstly, as conceded by the Examiner on page 6 of the Office Action, Petsko does not teach or suggest the above-highlighted features of claim 32.

Secondly, the Applicant respectfully submits that Tsuda also fails to teach or suggest the above-highlighted features of claim 32. In particular, Tsuda totally lacks any mention or suggestion of "converting [an] composite optical signal into an electrical signal", let alone into "an electrical signal having an electrical bandwidth that is substantially less than the bandwidth of the high-speed data stream". It is thus not surprising that the other above-highlighted features of claim 32 are also totally absent from Tsuda.

Thirdly, it is respectfully submitted that Nakamura also fails to teach or suggest the above-highlighted features of claim 32. Specifically, Nakamura relates to an interface apparatus for interconnecting apparatus of two different systems, namely, an apparatus of the SDH system and an apparatus of the SONET system. The interface apparatus of Nakamura includes a "light/electricity converting unit 141 [that] converts [an] STM-n signal (or STS-m signal) inputted through a transmission line (mainly an optical fiber) into an electrical signal" (col. 20, line 66 to col. 21, line 2). However, Nakamura does not further characterize the conversion performed by the

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"light/electricity converting unit". In particular, Nakamura totally lacks any teaching or suggestion that the "light/electricity converting unit" converts the optical signal into "an electrical signal having an electrical bandwidth that is substantially less than the bandwidth of the high-speed data stream". In fact, the Examiner only refers to Figure 8 and reference block #153 in Nakamura, which have absolutely nothing to do with an electrical signal having an electrical bandwidth that is substantially less than the bandwidth of the high-speed data stream. Hence, it is Applicant's respectful submission that the above-emphasized feature of claim 32, which is absent from Petsko and Tsuda, is also completely lacking in Nakamura.

Furthermore, since Nakamura does not teach or suggest conversion of an optical signal into a low-bandwidth electrical signal, it follows that Nakamura cannot possibly teach or suggest "locating the position of each wrapper segment in the low-bandwidth electrical signal" and "detecting individual bits of the overhead bit stream from the average level of the low-bandwidth electrical signal during the located wrapper segments". Again, the Examiner only refers to Figure 8 and reference block #153 in Nakamura which have absolutely nothing to do with these features. (Moreover, the Examiner has not referred to any of the cited references in an attempt to show that these two features of claim 32 have been taught or suggested.)

For the above reasons, it is respectfully submitted that at least one feature of claim 32 is neither taught nor suggested by the cited art, whether taken separately or in combination. As such, the Applicant respectfully submits that at least one criterion required for establishing a *prima facie* case of obviousness in accordance with MPEP 706.02(j) is not satisfied. Accordingly, it is respectfully submitted that claim 32 is in allowable condition, and, thus, the Examiner is respectfully requested to withdraw his rejection of claim 32.

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Dependent claims 33-35

Claims 33-35 depend either directly or indirectly on claim 32 and therefore include all of the features of claim 32. Hence, for the same reasons as those set forth herein above in respect of claim 32, the Applicant respectfully submits that claims 33-35 are in allowable condition. The Examiner is thus respectfully requested to withdraw his rejection of claims 33-35.

Independent claim 36

The Examiner's attention is directed to the following excerpt of claim 36, portions of which have been highlighted:

36. A system [...] comprising:
 means for **converting the composite optical signal into an electrical signal having an electrical bandwidth that is substantially less than the bandwidth of the high-speed data stream;**
 means for **locating the position of each wrapper segment in the low-bandwidth electrical signal;** and
 means for **detecting individual bits of the overhead bit stream from the average level of the low-bandwidth electrical signal during the located wrapper segments.**

It is respectfully submitted that the text of claim 36 parallels the text of claim 32.

Accordingly, for the same reasons as those set forth above in respect of claim 32, it is respectfully submitted that at least one feature of claim 36 is neither taught nor suggested by the cited art, whether taken separately or in combination. As such, the Applicant respectfully submits that at least one criterion required for establishing a *prima facie* case of obviousness in accordance with MPEP 706.02(j) is not satisfied. Accordingly, it is respectfully submitted that claim 36 is in allowable condition, and, thus, the Examiner is respectfully requested to withdraw his rejection of claim 36.

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Dependent claim 37

Claim 37 depends directly on claim 36 and therefore includes all of the features of claim 36. Hence, for the same reasons as those set forth herein above in respect of claim 36, the Applicant respectfully submits that claim 37 is in allowable condition. The Examiner is thus respectfully requested to withdraw his rejection of claim 37.

Independent claim 38

The Examiner's attention is directed to the following excerpt of claim 38, portions of which have been highlighted

38. A system [...] comprising:
- an optical tap coupler for **coupling a fraction of the optical power of the WDM signal;**
 - a front end connected to the coupler, for **separating the WDM signal into the plurality of single-carrier optical signals;**
 - a plurality of receivers connected to the front end, for **converting each single-carrier optical signal into a respective electrical signal having a bandwidth that is substantially less than the bandwidth of the corresponding high-speed data stream;**
 - a plurality of wrapper segment identifiers connected to the plurality of receivers, for **locating the position of wrapper segments in each low-bandwidth electrical signal;** and
 - a plurality of detectors connected to the plurality of wrapper segment identifiers, for **detecting individual bits of the overhead bit streams from the average level of the corresponding low-bandwidth electrical signal during the located wrapper segments.**

It is respectfully submitted that claim 38 recites features similar to those recited in claim 32.

Accordingly, for the same reasons as those set forth above in respect of claim 32, it is respectfully submitted that at least one feature of claim 38 is neither taught nor

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suggested by the cited art, whether taken separately or in combination. As such, the Applicant respectfully submits that at least one criterion required for establishing a *prima facie* case of obviousness in accordance with MPEP 706.02(j) is not satisfied. Accordingly, it is respectfully submitted that claim 38 is in allowable condition and, thus, the Examiner is respectfully requested to withdraw his rejection of claim 38.

In addition, the Office Action also failed to address the features of the system claimed in claim 38 that enable extraction of a plurality of overhead bit streams from a respective plurality of single-carrier optical signals forming part of a WDM optical signal. In particular, the Examiner failed to indicate how he believes the cited references teach or suggest the claimed:

- (1) "optical tap coupler";
- (2) "front end connected to the coupler";
- (3) "plurality of receivers connected to the front end";
- (4) "plurality of wrapper segment identifiers connected to the plurality of receivers"; and
- (5) "plurality of detectors connected to the plurality of wrapper segment identifiers".

It is respectfully submitted that these features are nowhere taught or suggested in the cited references.

Therefore, for the above additional reasons, it is once again respectfully submitted that at least one feature of claim 38 is neither taught nor suggested by the cited art, whether taken separately or in combination. As such, the Applicant respectfully submits that at least one criterion required for establishing a *prima facie* case of obviousness in accordance with MPEP 706.02(j) is not satisfied. Accordingly, it is once again respectfully submitted that claim 38 is in allowable condition and, thus, the Examiner is once again respectfully requested to withdraw his rejection of claim 38.

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4 Objection to claims 27-28

Dependent claims 27-28

In the Office Action, the Examiner objected to claims 27-28 as being dependent upon a rejected base claim (claim 22) but stated that these claims would be allowable if rewritten in independent form including the limitations of the base claim and any intervening claims. We thank the examiner for the indication of the allowable subject matter of these claims.

Claims 27-28 depend indirectly on claim 22 and directly on claim 26. We will therefore postpone the rewriting of these claims pending the Examiner's decision on the allowability of presently rejected base claims 22 and 26.

III. CONCLUSION

The Applicant gratefully acknowledges the allowance of claims 44-48 and the allowability of claims 27 and 28. Applicant is of the view that claims 1-43 and 49-54 are in allowable condition. Favorable reconsideration is requested. Early allowance of the application is earnestly solicited.

If the claims of the application are not considered to be in full condition for allowance, for any reason, the Applicant respectfully requests the constructive assistance and suggestions of the Examiner in drafting one or more acceptable claims pursuant to MPEP 707.07(j) or in making constructive suggestions pursuant to MPEP 706.03 so that the application can be placed in allowable condition as soon as possible and without the need for further proceedings.

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The Commissioner is hereby authorized to debit \$ 450.00 from Deposit Account No. 501593, in the name of Borden Ladner Gervais LLP.

The Commissioner is also authorized to charge any additional fees, and credit any over payments to Deposit Account No. 501593, in the name of Borden Ladner Gervais LLP.

Respectfully submitted,

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